

ASSOCIATION BETWEEN KNOWLEDGE LEVEL OF BENEFICIARY AND NON-BENEFICIARY FARMERS IN NAGOUR DISTRICT OF RAJASTHAN

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ABSTRACT

Proteins are an essential part of our diet, and for vegetarians, pulses are their main source of protein. Mungbeans is a pulse, consumed solely or along with rice askhichari. It is also added with vegetables and greens to prepare hearty soups. Its flour is used to prepare crepes or added to breads. Various spices enhance its flavor, especially turmeric, cumin, dried ginger and coriander. This study demonstrates the latest concept in this series, which is "Front Line Demonstration". This is a new concept of field demonstration designed by the ICAR with the commencement of the technology mission on oilseed and pulses crops in the mid nineteen eighty. This study was conducted in 12 FLD villages of four panchayat samities, namely Nagaur, Degana, Didwana and Merta. All the panchayat samities belonged to Nagaur district. The selected villages were adopted by KVK, Nagaur and a sample of 75 beneficiary farmers were selected randomly. Similarly, for comparison, 75 non-beneficiary farmers from another 12 non-FLD villages were selected. These non-beneficiary farmers were from the surrounding villages of the adopted villages. The knowledge level of beneficiary farmers regarding improved mungbean production technology was positively and significantly related with their education, social participation, and size of land holding, market distance, training received, extension participation, farm mechanization index and economic motivation. In contrast, in non-beneficiary farmers, their knowledge level regarding improved mungbean production technology was significantly associated with their education, social participation, size of land holding, market distance, training received and economic motivation, whereas extension participation and farm mechanization index were non-significantly associated with their knowledge level of improved mungbean production technology.

KEYWORDS: Panchayat Samities, Namely Nagaur, Degana, Didwana & Merta

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INTRODUCTION

Proteins are an essential part of our diet, and for vegetarians, pulses are their main source of protein. Mungbeans is a pulse consumed solely or along with rice askhichari. It is also added with vegetables and greens to prepare hearty soups. Its flour is used to prepare crepes or added to breads. Various spices enhance its flavor, especially turmeric, cumin, dried ginger and coriander. This study demonstrates the latest concept in this series, which is "Front Line Demonstration". This is a new concept of field demonstration designed by the ICAR with the commencement of the technology mission on oilseed and pulses crops in the mid nineteen eighty. Front Line Demonstration refers to the field demonstrations overseen by the scientists of the National Agricultural Research System. They were called so, because the technologies were displayed for the first time by the scientists themselves in the field prior to its extension by the state department of agriculture to the farmer. The scientists tested the feasibility, suitability and potentiality of evolved variety and /or technology.

METHODOLOGY

This study was conducted in 12 FLD villages of four panchayat samities, namely Nagaur, Degana, Didwana and Merta. All the panchayat samities belonged to Nagaur district. The selected villages were adopted by KVK, Nagaur and a sample of 75 beneficiary farmers were selected randomly. Similarly, for comparison, 75 non-beneficiary farmers from another 12 non-FLD villages were selected. These non-beneficiary farmers were from the surrounding villages of the adopted villages.

RESULTS AND DISCUSSIONS

The relationship between the knowledge level among farmers regarding improved mungbean production technology and various independent variables namely education, social participation, size of land holding, market distance, training received, extension participation, farm mechanization index and economic motivation was computed using “coefficient of correlation” (r). The resultant data were tabulated (Table 1).

Table 1: Relationship of Independent Variables between the Beneficiary and Non-Beneficiary Farmers in Association with Their Knowledge Level of Improved Mungbean Production Technology

S. No.	Variables	Beneficiary Farmers (N1=75)	Calculated ‘T’ Value	Non-Beneficiary Farmers (N2=75)	Calculated ‘T’ Value
1.	Education	0.328	2.267**	0.671	7.732**
2.	Social participation	0.434	4.116**	0.644	7.192**
3.	Size of land holding	0.328	2.267**	0.626	6.859**
4.	Marketing distance	0.408	3.818**	0.832	12.813**
5.	Training received	0.345	3.140**	0.733	9.207**
6.	Extension participation	0.363	3.329**	0.118	1.015 NS
7.	Farm mechanization index	0.347	3.161**	0.160	1.385 NS
8.	Economic motivation	0.467	4.512**	0.731	9.344**

**Correlation is significant at 0.01 level probabilities

NS = Non-significant

On analyzing the data presented in table 1 education, social participation, size of land holding, market distance, training received, extension participation, farm mechanization index and economic motivation were observed to be positively and significantly associated with the knowledge level of the beneficiary farmers regarding improved mungbean production technology. This correlation was perceived at 0.01 level of probability.

All previous hypotheses $Ho_{1.1}$, $Ho_{1.2}$, $Ho_{1.3}$, $Ho_{1.4}$, $Ho_{1.5}$, $Ho_{1.6}$, $Ho_{1.7}$ and $Ho_{1.8}$ were, therefore, rejected. Consequently, an association between the knowledge level of beneficiary about improved mungbean production technology and his/her education, social participation, size of land holding, market distance, training received, extension participation, farm mechanization index and economic motivation was established. These variables wielded a substantial significant effect on the knowledge level of beneficiary regarding improved mungbean production technology.

Furthermore, the data presented in Table 1 also demonstrated a similar significant correlation between the variables and the knowledge level of non-beneficiary farmers regarding improved mungbean production technology. This correlation was perceived at 1 per cent level of significance. However, the variables extension participation and farm mechanization index were non-significantly associated.

Consequently, the hypotheses $Ho_{1.1}$, $Ho_{1.2}$, $Ho_{1.3}$, $Ho_{1.4}$, $Ho_{1.5}$ and $Ho_{1.8}$ were rejected. However, the hypotheses $Ho_{1.6}$ and $Ho_{1.7}$ were found relevant and were accepted. Thereby, this study also found an association between the knowledge level of non-beneficiary farmers about improved mungbean production technology and their education, social participation, size of land holding, market distance, training received and economic motivation. These variables wielded a substantial significant effect on the knowledge level of non-beneficiary farmers regarding improved mungbean production technology. The observations also confirm the hypotheses $Ho_{1.6}$ and $Ho_{1.7}$. These hypotheses suggest that “there is no association between the extension participation and farm mechanization index of the respondents and their knowledge level regarding improved mungbean production technology”. Therefore, we could conclude that these variables had a non-significant influence on the knowledge level of non-beneficiary farmers regarding improved mungbean production technology.

DISCUSSIONS

Education

The data in table 1 displays a positive association between education and the knowledge level of beneficiary farmers and non-beneficiary farmers regarding improved mungbean production technology. The association was observed to be significant at 1 per cent level.

The suggested null hypothesis ($Ho_{1.1}$) that “there is no association between knowledge level of beneficiary farmers and non-beneficiary farmers about improved mungbean production technology and their education” was consequently rejected. Education had a profound impact on the knowledge level of beneficiary farmers and non-beneficiary farmers.

Such an outcome could be because all the respondents were educated. Their education would have expanded their knowledge regarding improved mungbean production technology. Furthermore, educated farmers are more likely to have acquired added knowledge regarding new agricultural technologies.

Social Participation

The data in table 1 demonstrates a strong positive and significant impact of social participation of the beneficiary farmers and non-beneficiary farmers on the knowledge level of improved mungbean production technology. Consequently, the null hypothesis ($Ho_{1.2}$) stating “there is no association between the knowledge level of beneficiary farmers and non-beneficiary farmers about improved mungbean production technology and their social participation” was rejected. Such an outcome could be because the farmers might have updated their knowledge regarding improved mungbean production technology by their participation in diverse social activities.

Size of Land Holding

The data in table 1 demonstrates a strong positive and significant impact of the size of land holding of the beneficiary farmers and non-beneficiary farmers on their knowledge level of improved mungbean production technology. Consequently, the null hypothesis ($Ho_{1.3}$) stating that “there is no association between the knowledge of beneficiary farmers and non-beneficiary farmers about improved mungbean production technology and their size of land holding” was rejected. Such an outcome could be because the size of land holding was an essential factor that had financial and added responsibility consequences. Therefore, this variable helped to acquire knowledge regarding mungbean production technology.

Market Distance

The data in table 1 suggests strong positive and significant impact between the market distance and the knowledge level of beneficiary farmers and non-beneficiary farmers regarding improved mungbean production technology. Consequently, the null hypothesis ($H_{01.4}$) stating that “there is no association between the knowledge of improved mungbean production technology by the beneficiary farmers and non-beneficiary farmers and their market distance” was rejected.

Such an outcome could be because; the farmer’s living far away from the market having a greater exposure to information sources. This might be a result of their cautious nature and, therefore, tend to be updated regarding information about market rates; market policy, etc. Such an awareness also increases their knowledge level.

Training Received

The data in table 1 demonstrates positive and significant impact of training on the knowledge level of improved mungbean production technology among beneficiary farmers and non-beneficiary farmers. Consequently, the null hypothesis ($H_{01.5}$) stating that “there is no association between the knowledge level of beneficiary farmers and non-beneficiary farmers about improved mungbean production technology with their training received” was rejected. Farmers undergoing training had a higher level of knowledge regarding improved mungbean production technology. Such an outcome could be because, the farmers attending training programmes might be more eager to discuss improved mungbean production technology. They are more prone to do so because, they experience in first hand during training the result-oriented field demonstrations and field trials using improved mungbean production technology. These training programmes are extensively conducted by extension workers, who help the respondents to improve their skills and adopt newer technologies. In contrast, non-beneficiary farmers might obtain such knowledge only from other farmers in their neighborhood who improved mungbean production after applying the technology received during training.

Extension Participation

The data in table 1 demonstrates significant impact between extension participation and knowledge level among beneficiary farmers. In contrast, it was non-significant among non-beneficiary farmers.

Consequently, the null hypothesis ($H_{01.6}$) stating “there is no association between knowledge level of beneficiary farmers and non-beneficiary farmers about improved mungbean production technology and their extension participation” was rejected in the case of beneficiary farmers and accepted for non-beneficiary farmers.

Such an outcome could be because beneficiary farmers usually participated in various KVK activities, where scientists provided them not only information but also facilities that increased their knowledge level and also resulted in improved mungbean production. However, non-beneficiary farmers did not participate in KVK activities and were therefore ignorant regarding the various newer technologies employed for improved production.

Farm Mechanization Index

The data in table 1 suggests a significant relationship between farm mechanization index and the knowledge level of beneficiary farmers regarding improved mungbean production technology. In contrast, the relationship was non-significant among non-beneficiary farmers.

The null hypothesis ($H_{01.7}$) stating “there is no association between the knowledge level of beneficiary farmers and non-beneficiary farmers and their farm mechanization index” was rejected for beneficiary farmers and accepted for non-beneficiary farmers. Such an outcome could be because, the beneficiary farmers might have improved their farm machinery by employing the knowledge attained through KVK. However, the non-beneficiary farmers lacked the exposure by KVK.

Economic Motivation

The data in table 1 suggests a significant association between economic motivation and the knowledge level of both beneficiary farmers and non-beneficiary farmers regarding improved mungbean production technology. The association was significant at 1 per cent level.

The null hypothesis ($H_{01.8}$) stating “there is no association between the knowledge level of beneficiary farmers and non-beneficiary farmers about improved mungbean production technology and their economic motivation” was rejected.

Such an outcome could be because; the economic situation of the farmer might have improved after the usage of improved mungbean production technology. The usage of this technology would have increased the production and thereby the income of farmers. Furthermore, an improved financial condition would provide more opportunities to improve the knowledge level regarding newer agricultural technology.

CONCLUSIONS

- the knowledge level of beneficiary farmers regarding improved mungbean production technology was positively and significantly related with their education, social participation, size of land holding, market distance, training received, extension participation, farm mechanization index and economic motivation.
- In contrast, in non-beneficiary farmers, their knowledge level regarding improved mungbean production technology was significantly associated with their education, social participation, size of land holding, market distance, training received and economic motivation, whereas extension participation and farm mechanization index were non-significantly associated with their knowledge level of improved mungbean production technology.

RECOMMENDATIONS

- The farmers should be enthusiastic and encouraged to involve themselves in various extension programmes such as training, demonstration, exhibition, agricultural quiz programmes and farmers fair. These extension activities will provide the farmers with newer prospects to learn new things.
- Front line demonstration helps to gain wide publicity and should, therefore, be conducted on all the farmers' fields instead of selecting only a few.

REFERENCES

1. Arneja, C.S. and Khangura, R.S. (2003). "A study of the knowledge of pea growers and its association with their selected socio personal characteristics". *Rural India*, 66 : 166-168.
2. Badhala, B.S. (2008). "Impact of Front Line Demonstration in adoption of mothbean production technology by the farmers of arid region of Rajasthan. M.Sc. (Ag.) Thesis, (Unpub.), S.K.R.A.U Bikaner -Campus
3. Bhimawat, B.S. and Gupta, A. (2005) "Adoption of improved soybean cultivation technology by farmers of Chittorgarh district". *Indn. Res. J. Extn. Edu.* 5 (1): 4-6.
4. Burman, A.R., Singh, S.K., Singh, L. and Singh, A.K. (2006). "Adoption of improved pulses production technologies and related constraints in Uttar Pradesh". *Indn. J. Pulses Res.*, 19 (1) : 104-106.